

REMARKS

In the Office Action of December 18, 2003, claims 1-5 were rejected as unpatentable under 35 USC 103(a) over Belpaire, EP 000777394 in view of Svoboda et al. publication entitled "Heterogenity and OSI."

The second reference was not supplied with the Office Action, but was supplied by the Office Correspondence of March 15, 2004, which extended the time for response to April 15, 2004.

In reply, claims 1-5 have been amended to more particularly point out and distinctly claim the invention under 35 USC 112, second paragraph. In addition, new claims 6-10 to the method are presented as well as new claims to the gateway of the present invention as shown in Fig. 3 and described in the specification.

Applicant's figure 3 illustrates the manner in which data and signals are passed between the Internet and a GSM network. The GSM network data packet 15 includes data field 16 and field 17 for signaling data (address and control data). The Internet data packet 20 includes data field 18 and field 19 for signaling data (address and control data). The data in the two fields 18 and 19 of packet 20 are incorporated in fields 16 and 17 of the GSM data packet 15. In order to do this, the size of field 18 is limited to the size of field 16.

On the other hand, it is not understood what the Examiner is stating about Belpaire at the bottom of page 2 and the top of page 3 in the Office action. The Examiner states that Belpaire teaches a field of useful data traversing fields F, P, D, A and E and a header portion traversing F, DTM and E. Applicant disagrees that the reference teaches this from the drawing or from the description at col. 7, lines 20-32. In any event the Examiner agrees that the field arrangement on the GSM network in Belpaire is different than Belpaire's packet on the Internet. In fact, Belpaire chops up the data packet into many smaller data packets. Actually, F, P, D, A, E and DTM are not packets as stated in the Office action, they are

functional pieces of circuitry, such as filtering means (F), decomposition means (D) and processing means (P). There is a mapping or correspondence between messages on the Internet and GSM network in Belpaire, but this is not the correspondence recited in the present claims.

The office action discusses the term "embedding" at length, however, this is not understood, because the claims do not use that term.

It is correct that there is an embedding of sorts in the present invention in that Internet addresses can be included in the GSM network data packets (page 5, 2nd last full paragraph), however, GSM telephone numbers are eliminated from both the protocols (see page 6, 2nd paragraph). (See claims 3, 8 and 13).

Svoboda et al. publication entitled "Heterogenity and OSI," discusses Interdomain Addressing and Protocol Conversion. It is believed that that Interdomain Addressing is less relevant and that the present issue concerns protocol compatibility.

In the present invention, two fields 18 and 19 of packet 20 are incorporated in counterpart fields 16 and 17 of the GSM data packet 15. In order to do this, the size of field 18 is limited to the size of field 16. Thus, the present invention provides a protocol configuration and size which is the same for communicating on the GSM network and the Internet. This is not seen or suggested in Belpaire or Svoboda or the other references of record. In particular, this is not suggested by the discussion of Service Interface Mapping and Protocol Flow Mapping discussed in Svoboda. Of course there must be a flow between communication on the two networks, but Svoboda et al is too generalized to suggest the solution of the present claims.

Belpaire, for example, only shows a one-way transmission of short mail messages from the Internet to a cellular phone. There is no comparable reverse transmission of data. Claim 1 has been amended to recite bi-directional communication of data packets.

The present invention uses a particular addressing method avoiding encapsulation (page 3, 2nd paragraph from bottom page). That particular addressing method consists in combining mapping, extended address structure (merging, or adding, the signalling of the packets of one domain to the other, see Claims 1 and 2), and other means like deleting unuseful fields (claim 3), none of these other means being dealt with in Svobodova. Svobodova teaches the proxy/alias addressing process, which is not used in the instant case, the proxy process being an address substitution in the signalling of the packets (Svobodova: page 75, 3rd line, 6th to 9th lines).

Andersson, US 6,047,194 discloses a method for selectively permitting transmission of packet data to a mobile terminal, which is provided with an indication of the originator, from an originator of an unknown source (see col. 3 lines 19-25 and line 30, and also 45-47).

In Andersson, addressing the mobile station is done by translation (col. 6, line 31-32) and packet data are conventionally encapsulated (col. 6, lines 45-51; col. 7 lines 1-7, lines 36-45) which has been rejected in the pending application (page 3, second last paragraph).

Claim 1 provides for transmitting data in either direction, which distinguishes from Belpaire. The data in two packet fields (18, 19) in packets that are communicated on the second network (6) are transported on the first network (2) respectively within two counterpart packet fields (16, 17) of packets that are communicated on the first network (2). This is not taught by any of the cited references.

Claims 2, 4, 7 and 9 are directed to adding addresses such as the Internet address as in the control field of the GSM network protocol.

In claims 3 and 8, the data packet fields for signaling data on the Internet network are limited in size and configuration to the size and configuration of data packet fields on the first network, and code words of the first network, such as telephone numbers which have no use in

connections between two such networks (2, 6), are eliminated from the protocol.

Claims 5 and 10 is directed to methods and features of the gateway which allow the bi-directional communication of data messages.

New claim 6 is directed to certain features of claims 1 and 3, while eliminating other features not seen necessary for the broadest aspects of the inventor.

New claims 11-15 are apparatus claims directed to a gateway for performing operations recited in the process claims.

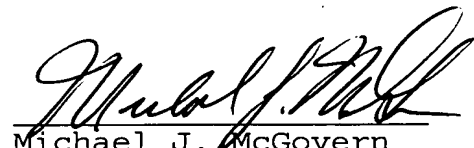
CONCLUSION

It is believed that no fee is due, but if any fee is deemed to be due, please charge Deposit Account No. 17-0055.

In view of the Amendment and Remarks, reconsideration of the application is respectfully requested. After the amendment, claims 1-15 are now pending and a Notice of Allowance for these claims is earnestly solicited.

Respectfully submitted,

By:


Michael J. McGovern
Quarles & Brady LLP
411 East Wisconsin Avenue
Milwaukee, WI 53202
(414) 277-5725
Attorney of Record